

CLAIMS

What is claimed is:

1. A communication system comprising a first communication apparatus and a second communication apparatus, wherein

the first communication apparatus comprises:

first spreading code generating means for generating a spreading code;

means for spreading a signal by using the spreading code generated by the first spreading code generating means; and

means for transmitting the spread signal, and

the first spreading code generating means generates the spreading code by using a same short code for an inphase component and a quadrature component and different long codes for the inphase component and the quadrature component, and

the second communication apparatus comprises:

means for receiving the spread signal;

second spreading code generating means for generating the spreading code; and

means for despreading the spread signal by using the spreading code generated by the second spreading code generating means, and

the second spreading code generating means generates the spreading code by using the same short code for the inphase component and the quadrature component and the different long codes for the inphase component and the quadrature component.

2. The communication system as claimed in claim 1, wherein the long code for the quadrature component is a code obtained by shifting a phase of the long code for the inphase component.

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ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

3. A communication apparatus comprising:

spreading code generating means for generating a spreading code;

means for spreading a signal by using the spreading code generated by the spreading code generating means: and

means for transmitting the spread signal,

wherein the spreading code generating means generates the spreading code by using a same short code for an inphase component and a quadrature component and different long codes for the inphase component and the quadrature component.

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4. A communication apparatus comprising:

means for receiving a spread signal;

spreading code generating means for generating a spreading code; and

means for despreading the spread signal by using the spreading code generated by the spreading code generating means,

wherein the spreading code generating means generates the spreading code by using a same short code for an inphase component and a quadrature component and different long codes for the inphase component and the quadrature component.

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